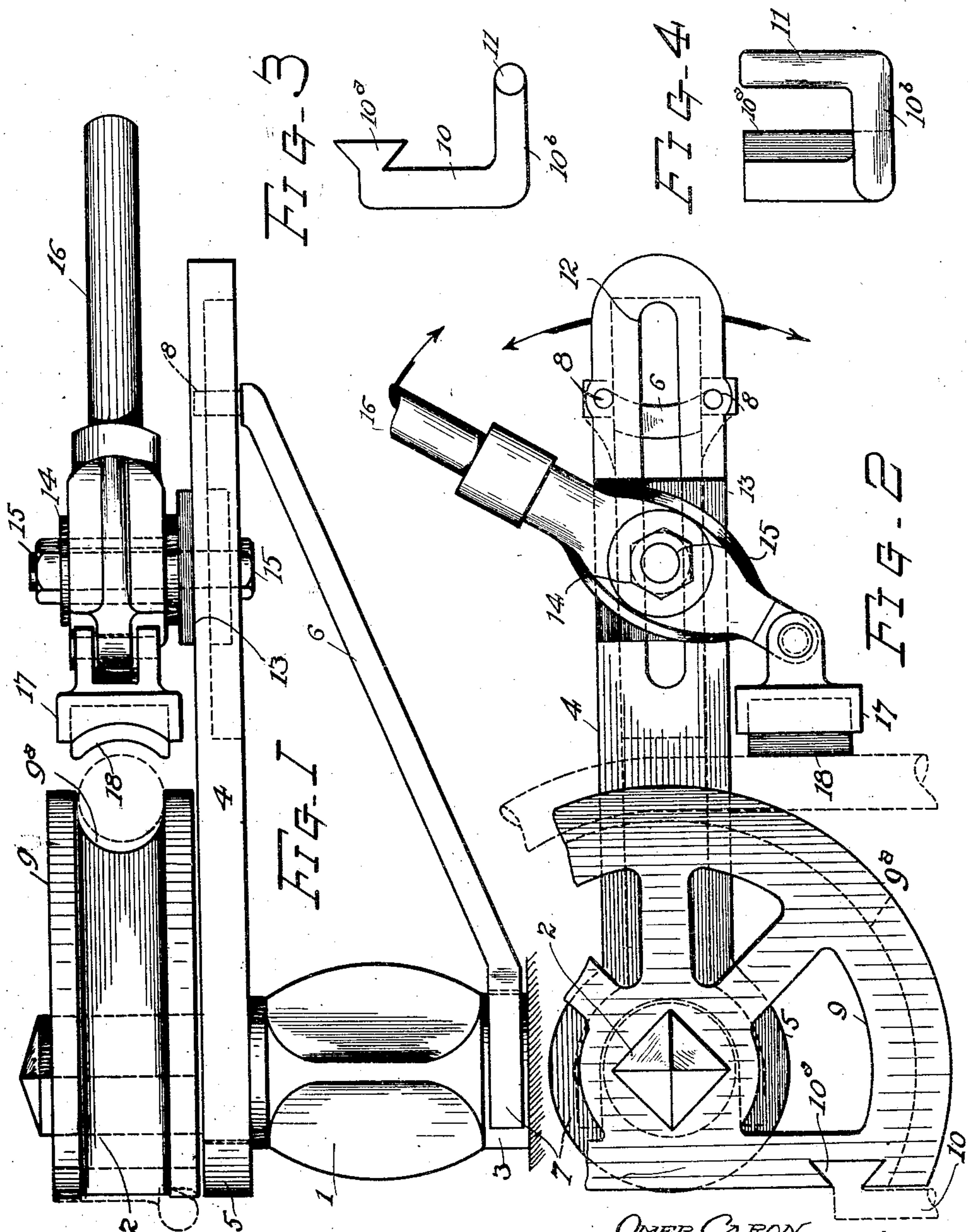


O. CARON & G. SURPRENANT.
PIPE BENDER.
APPLICATION FILED FEB. 23, 1915.

1,155,042.

Patented Sept. 28, 1915.



Witnesses:

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UNITED STATES PATENT OFFICE.

OMER CARON AND GEORGE SURPRENANT, OF MAISONNEUVE, QUEBEC, CANADA.

PIPE-BENDER.

1,155,042.

Specification of Letters Patent.

Patented Sept. 28, 1915.

Application filed February 23, 1915. Serial No. 9,786.

To all whom it may concern:

Be it known that we, OMER CARON and GEORGE SURPRENANT, both subjects of the King of Great Britain, and residing at No. 464 Lasalle avenue, Maisonneuve, Province of Quebec, Canada, have invented certain new and useful Improvements in Pipe-Benders; and we do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention to be hereinafter described relates to pipe benders.

In order to more clearly disclose the construction, operation, and use of the invention, reference should be had to the accompanying drawings forming part of the present application.

Throughout the several figures of the drawings like reference characters designate the same parts.

In the drawings: Figure 1 is a side view of the bender; Fig. 2 is a top plan view of the same; Fig. 3 is a top plan view of the pipe securer; and Fig. 4 is a front view of the same.

The main objects of the invention are, to provide a neat, efficient, and durable pipe bender, capable of quickly and easily bending pipes into any desired form.

Referring to the drawings in detail, 1 designates a supporting post fixedly secured to a suitable base. The upper portion of this post is reduced and rounded for a short distance only, the remainder of the upper portion being squared, as at 2, and a rounded portion 3 is provided at the lower end of the post.

A horizontal beam 4 provided on its inner end with an integral collar 5 is revolvably mounted on the upper rounded portion of post 1. This beam is braced and supported by a slanting beam 6 provided, on its lower end, with a fork 7 which straddles the rounded portion 3 at the bottom of the post, and on its upper end with integral pins 8 which fit into suitable bores in the beam, near the outer end thereof.

A suitably shaped bending form 9 is mounted on the squared upper portion of post 1, above beam 4, being provided with a bore of the same cross section as the squared portion of the post, which thus secures it against movement. This bending form is provided with an annular groove 9^a

of semicircular cross section. Near each end of the form a recess of V cross section is provided, adapted to snugly receive the similarly shaped head 10^a of a pipe securer 10. This securer is provided with a forwardly bent arm 10^b provided at its end with an integral vertical pin 11. When the pipe securer is in operative position, pin 11 is to one side of, and extends a short distance along, the bending form. By inserting the end of the pipe between the pin and the form, it will be held securely in position.

A slot 12 is provided in the outer portion of beam 4 and a pair of blocks 13 is slidably mounted above and below the slot, on the opposite faces of the beam. A sleeve 14 is mounted on top of the upper block 13 and secured in position by a bolt 15 passed therethrough and through both blocks. This bolt also serves to secure the blocks and the sleeve in longitudinal adjustment of beam 4.

A lever 16 is revolvably mounted on sleeve 14 and is provided, on its inner end, with a bending foot 17 pivotally connected thereto. This foot carries a removable block 18 which may be renewed or changed, as desired.

In using this device, a bending form having a groove of slightly less diameter than the pipe to be bent is used. This prevents the pipe from contacting with the bottom of the groove, thus eliminating any flattening thereof which might otherwise result from great pressure.

In the drawings, a bending form of approximately semicircular shape is shown, but the shape of the form may be varied according to the shape of bend required.

The longitudinal adjustment of bending lever 16 permits pipes of practically any size or length to be bent on this device.

It is thought that the construction, operation, and use of the invention will be clear from the preceding detailed description.

Changes may be made in the construction, arrangement, and disposition of the several parts of the invention without in any way departing from the field and scope of the same, and it is meant to include all such within this application wherein only a preferred form has been disclosed.

Having thus fully described our invention, what we claim as new and desire to secure by Letters Patent is:

In combination in a pipe bender of the character described: a fixedly mounted post having a lower rounded portion, an upper

squared portion, and an intermediate rounded
 portion; a beam revolubly mounted on
 the intermediate rounded portion of the said
 post and provided with a slot near its outer
 5 end; a bracing and supporting beam there-
 for provided on its lower end with a fork
 which straddles the lower rounded portion
 of the said post, and on its upper end with
 pins which fit into bores in the said beam;
 10 a pair of blocks mounted above and below
 the said beam, at the slotted portion thereof;
 a sleeve mounted on the upper one of said
 blocks; a securing pin passed through said
 blocks and sleeve; a bending lever revolubly
 15 mounted on said sleeve; a bending foot piv-
 otally connected to the inner end thereof;
 a block revolubly mounted therein; an an-
 nularly grooved bending form provided with

a squared bore fixedly mounted on the
 squared portion of the said post, the said 20
 form being provided at each end with a
 recess adapted to receive the head of a pipe
 securer; and a pipe securer provided with a
 head adapted to fit snugly into the recess of
 the said bending form and having a for- 25
 wardly bent arm with an integral vertical
 pin adapted to extend a short distance along,
 and to one side of, the bending form when
 the said securer is in operative position.

In witness whereof we have hereunto set 30
 our hands in the presence of two witnesses.

OMER CARON.

GEORGE SURPRENANT.

Witnesses:

A. BASTIEA,

H. CISOBER.